Schottky barrier diode

RB521CS-30

●**Applications**

Low current rectification

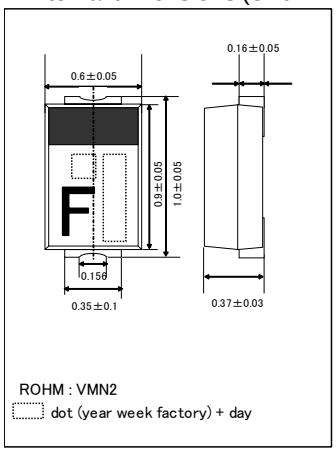
●**Features**

1) Ultra Small power mold type (VMN2)
2) Low V_F
3) High reliability

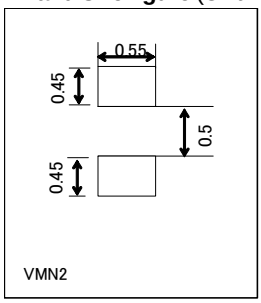
●**Structure**

Silicon epitaxial planer

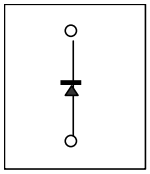
●**External dimensions** (Unit : mm)



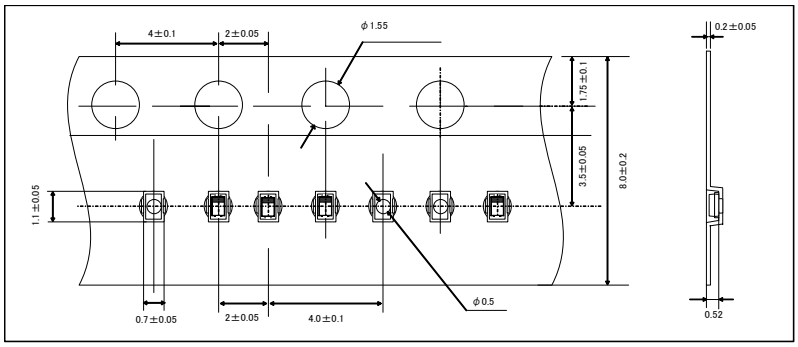
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



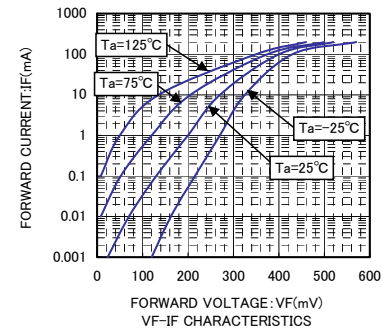
●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	V_R	30	V
Average rectifierd forward current	Io	100	mA
Forward current surge peak （60Hz・1cyc)	I_{FSM}	500	mA
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-40 to +125	℃

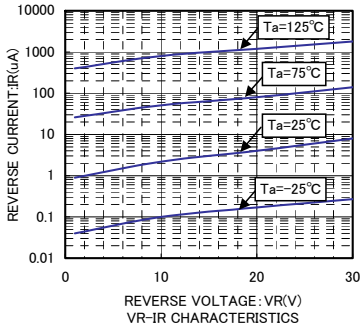
●**Electrical characteristic** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward vpltage	V_F	-	-	0.35	V	I_F=10mA
Reverse current	I_R	-	-	10	μA	V_R=10V

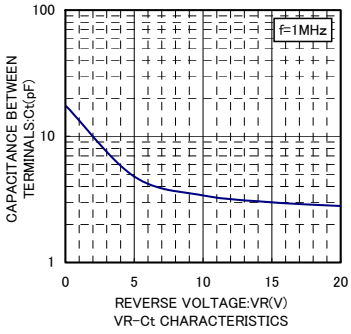
●Electrical characteristic curves



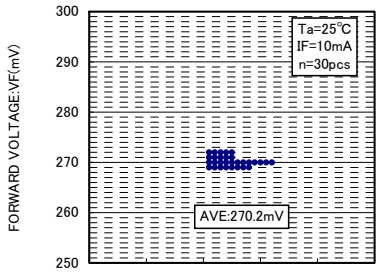
VF-IF CHARACTERISTICS



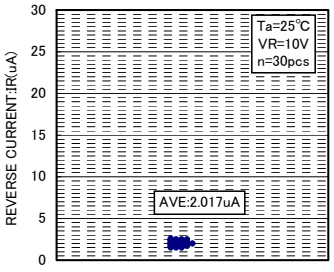
VR-IR CHARACTERISTICS



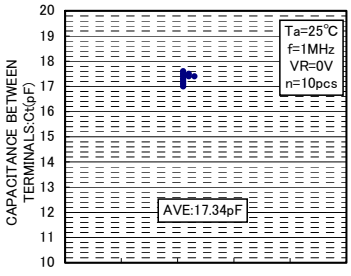
VR-Ct CHARACTERISTICS



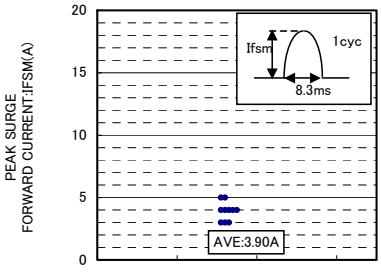
VF DISPERSION MAP



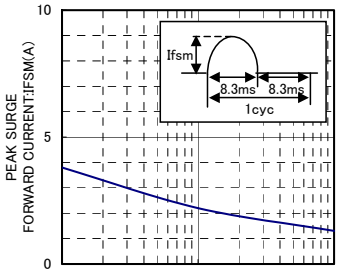
IR DISPERSION MAP



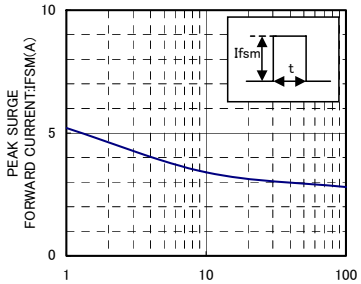
Ct DISPERSION MAP



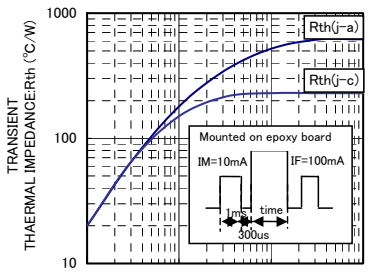
IFSM DISRESION MAP



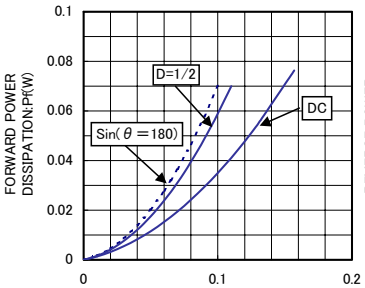
IFSM-CYCLE CHARACTERISTICS



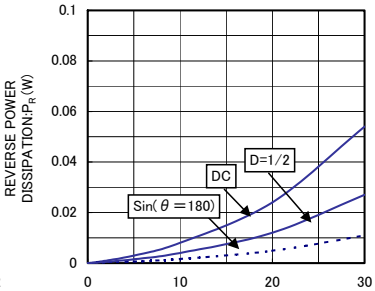
IFSM-t CHARACTERISTICS



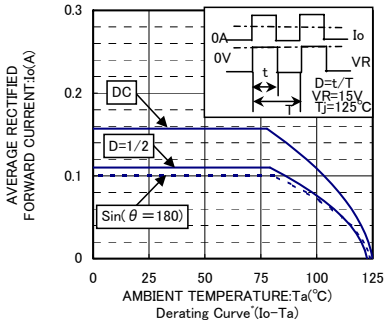
Rth-t CHARACTERISTICS

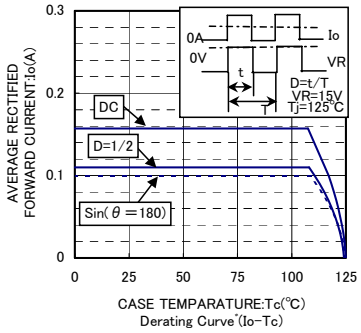


Io-Pf CHARACTERISTICS



VR-PR CHARACTERISTICS


0.3
0.2
0.1
0
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
0A
0V
Io
VR
t
T
D=t/T
VR=15V
Tj=125°C
DC
D=1/2
Sin(θ=180)
0
25
50
75
100
125
AMBIENT TEMPERATURE:Ta(℃)
Derating Curve(Io-Ta)


0.3
0.2
0.1
0
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
0A
0V
Io
VR
t
T
D=t/T
VR=15V
Tj=125°C
DC
D=1/2
Sin(θ=180)
0
25
50
75
100
125
CASE TEMPARATURE:Tc(℃)
Derating Curve(Io-Tc)

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